(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 April 2004 (22.04.2004)

PCT

(10) International Publication Number
WO 2004/032862 A3

(51) International Patent Classification[7]: A61F 13/00

(21) International Application Number:
PCT/US2003/031991

(22) International Filing Date: 8 October 2003 (08.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/417,373 9 October 2002 (09.10.2002) US

(71) Applicant *(for all designated States except US)*: **INSERT THERAPEUTICS, INC.** [US/US]; 2585 Nina Street, Pasadena, CA 91107 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **BELLOCQ, Nathalie, C.** [FR/US]; 3129 Raymond Avenue, Altadena, CA 91001 (US). **DAVIS, Mark, E.** [US/US]; 575 Laguna Road, Pasadena, CA 91105 (US). **PUN, Suzie, Hwang** [US/US]; 5327 Doris Way, Torrance, CA 90505 (US).

(74) Agents: **HALSTEAD, David, P.** et al.; Ropes & Gray LLP, One International Place, Boston, MA 02110-2624 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
1 July 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CYCLODEXTRIN-BASED MATERIALS, COMPOSITIONS AND USES RELATED THERETO

(57) Abstract: The application discloses cyclodextrin-modified materials for carrying drugs and other active agents, such as nucleic acids. Compositions are also disclosed of cyclodextrin-modified materials that release such active agents under controlled conditions. The invention also discloses compositions of cyclodextrin-modified polymer carriers that are coupled to biorecognition molecules for assisting the delivery of drugs to their site of action.

WO 2004/032862 A3

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/31991

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61F 13/00
US CL : 424/422

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 424/422

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,033,486 A (ANDROS) 07 March 2000. See entire document.	1-30

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
08 March 2004 (08.03.2004)

Date of mailing of the international search report
17 MAY 2004

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (703) 305-3230

Authorized officer
Liliana D. Nola-Baron

Telephone No. 308-1234/ 1235

Form PCT/ISA/210 (second sheet) (July 1998)